## A New Species of Styloceras (Buxaceae) from Peru

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ABSTRACT. A new species of Buxaceae from the central Peruvian Andes is described as Styloceras penninervium.

While revising collections of *Styloceras* during the process of identifying the first collection of this genus from Venezuela (Bautista & Aymard, in press), the junior author discovered two specimens that do not fit any of the described species. He brought them to the attention of the senior author, who has previously studied this genus (Gentry & Foster, 1981). We concur that they represent a new species, which is described here.

Styloceras penninervium A. Gentry & Aymard, sp. nov. TYPE: Peru. Junín: Provincia Tarma, sector "Agua Dulce," 1,800 m, 23 Mar. 1948 (fl), Woytkowski 35497 (holotype, MO). Figure 1.

Arbor parva dioecia. Folia anguste elliptica, glabra, coriacea, pinnatim nervata. Inflorescentia masculina axilaris, spicata, 3-6 cm longa, floribus apetalis, subsessilibus, bracteolis ovatis subtentis, antheris 2-2.5 mm longis. Fructus globosus 2-2.5 cm diametro, stigmatum duorum elongatorum basibus disjunctis 1 cm.

Dioecious shrub or small tree to 4 m tall, the branchlets glabrous, striate. Leaves alternate, 12-18 cm long, 5-9 cm wide, elliptic to narrowly elliptic, coriaceous, glabrous above and below, the margin revolute, apex acutish, sometimes minutely emarginate, cuneate at base, the midvein prominent below and impressed above, pinnately veined, the secondary veins plane above and nearly plane below, the tertiary venation barely visible, plane above and below; petioles canaliculate, glabrous, 2-3 cm long, 2-3 mm wide. Masculine inflorescence an axillary spike, in fascicles of 1-3, glabrous, striate, 3-6 cm long, the apetalous flowers subsessile on pedicel ca. 1 mm long, subtended by an acuminate deltoid-ovate bract 3-4 mm long and 2-3 mm wide; the flowers apetalous, the 12-17 naked anthers 2-2.5 mm long. Fruits pedicellate, globose, 2-2.5 cm diam., the

pedicels glabrous, 1-2 cm long, with several small triangular bracts 1-1.5 mm long, the minute calyx persistent, with 5 triangular lobes, the two conspicuous stigmas persistent, recurved at apex, ca. 2 cm long, the bases separated by 1 cm, irregularly dehiscing.

Distribution. Known only from the eastern slope of the central Peruvian Andes between 1,800 and 1,850 m.

Styloceras penninervium differs from all four of the previously known Styloceras species in its pinnately veined leaves, not at all triplinerved at the base. It also has the secondary veins less prominent below than in any of the known species. On the basis of the large fruits, one of the specimens of S. penninervium was originally identified (with a query) as a variant of lowland S. brokawii A. Gentry & R. Foster, the species that is also most similar in having the least strongly 3-veined leaves heretofore known in the genus. However, S. brokawii differs in the very different, more slender male inflorescence with smaller (1 mm long) bracts subtending smaller flowers with anthers ca. 1 mm long. It also is distinct in the much thinner leaf texture and more broadly elliptic leaves with a distinctly 3-plinerved base. On the basis of the relatively dense inflorescence, rather large anthers, and coriaceous leaves, S. penninervium is closer to S. laurifolium (Willdenow) HBK, which grows at higher altitudes (2,300-3,800 m), and differs strongly in the more pronounced secondary veins and especially in having the basal pair of lateral veins strongly ascending. It also differs in having a smaller fruit 1.5-2 cm in diameter.

Paratype. PERU. **Pasco:** Provincia Oxapampa, 5 km SE of Oxapampa, 1,850 m, 75°23′W, 10°36′S, 1 Feb. 1983 (fr), D. Smith 3206 (MO, USM).

KEY TO THE FIVE SPECIES OF STYLOCERAS



Figure 1. Styloceras penninervium A. Gentry & Aymard. — A. Habit (Woytkowski 35497, MO). — B. Fruit (D. Smith 3206, MO).

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1b. Leaves 3-plinerved; secondary veins prominent below.

- 2b. Stigma bases separated by >3 mm in fruit; tertiary veins plane below, the lower surface smooth between the secondary nerves.

  - 3b. Plants mostly dioecious (rarely with a female flower at base of male inflorescence); anthers 1-2 mm long; Bolivia to Venezuela.
    - 4a. Leaves coriaceous, strongly
      3-veined from near base; anthers
      1.5-2 mm long; fruit 1.5-2 cm
      diam.; southern Peru to Venezuela, above 2,200 m .......
      ... S. laurifolium (Willdenow) HBK
    - 4b. Leaves chartaceous or firmly

membranaceous, weakly 3-veined from near base; anthers 1 mm long; fruit 2-3 cm diam.; lowland Bolivia and southern Peru ....

S. brokawii A. Gentry & R. Foster

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## Literature Cited

- Bautista, J. & G. Aymard. El género Styloceras (Buxaceae) en los Andes de Venezuela. Biollania 9 (in press).
- Gentry, A. H. & R. Foster. 1981. A new Peruvian Styloceras (Buxaceae): Discovery of a phytogeographical missing link. Ann. Missouri Bot. Gard. 68: 122-124.